INQUIRY PARADIGM FOR UNDERSTANDING LIVABLE URBAN SPACE IN LOCAL KNOWLEDGE FRAMEWORK

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ABSTRACT

By the year 2050, urbanization makes 70% of the global population expected to live in cities, and creates strong pressure for cities to provide livable solutions, to create human-centered cities with a genuine consideration for the environment. The two very important keywords are "livable" and "human-centered". It means that local knowledge should play the most important role in creating human-centered livable urban space. The nature of livable urban space and its related local knowledge, thereby, should be appropriately explored or inquired. Based on the characteristic of local knowledge as a collection of facts related to the entire system of concepts, beliefs and perceptions that people hold about the world around them, one basic questions relevant to the science of "livable urban space" is which inquiry paradigm be the most appropriate pradigm to comme to that science. Deciding to take one posture of various inquiry paradigms will guide the inquirer to come to a certain finding or answer. This working paper is about option for inquiry, about options among the paradigms or basic belief systems that guide action/inquiry to understand the meaning of livable urban space and its related local knowledge. Using inquiry paradigms characterized by Guba as analysis tools, literature based discussion in this paper concludes that the nature livable urban space and its related local knowledge can be understood from vorious inquiry paradigms, including constructivictic inquiry paradigm. Take the constructivist posture, which beliefs that there can be many constructions, including various inquiry paradigms, which can not be rejected out of hand, thereby, could be understood that there is no foundational way to choose among various constructions of inquiry paradigms proposed by reasonable and well-intentioned person, except the inquirer's belief.

Keywords: inquiry paradigm, understanding, livable, urban space, local knowledge

ABSTRAK

Menjelang tahun 2050, akibat urbanisasi, diprediksi sekitar 70% populasi dunia akan tinggal di perkotaan, yang pada gilirannya memberikan tekanan yang sangat kuat bagi pemecahan permasahan kota yang lebih manusiawi, kota layak huni atau human-centered cities dengan pertimbangan-pertimbangan khas lingkungannya. Dua kata kunci yang sangat penting adalah "layak huni" (livable) dan "human-centered". Hal ini juga berarti bahwa pengetahuan lokal (kearifan lokal) memainkan peranan penting dalam menciptakan ruang kota layak huni yang berpusat pada manusianya. Sifat ruang kota layak huni dan pengetahuan lokal yang terkait, hendaknya digali dan dipahami dengan cara yang tepat. Berdasarkan pada karakteristik pengetahuan lokal sebagai sekumpulan fakta yang terkait dengan keseluruhan sistem konsep, keyakinan, dan persepsi yang dipegang komunitas mengenai lingkungannya, maka satu pertanyaan mendasar terkait dengan pengetahuan ilmiah ruang kota layak huni, adalah paradigma penelitian yang mana yang paling sesuai untuk sampai pada ilmu pengetahuan tersebut. Keputusan untuk menentukan sikap dalam memilih salah satu paradigma penelitian akan menuntun peneliti pada temuan-temuan tertentu. Kertas kerja ini mendiskusikan mengenai pilihan pendekatan penelitian, yang akan menuntun tindakan penelitian untuk memahami makna ruang kota layak huni dan pengetahuan atau kearifan lokal terkait. Dengan menggunakan paradigma penelitian yang di karakterisasikan oleh Guba sebagai pisau analisis, diskusi berbasis kajian pustaka dalam kertas kerja ini menyimpulkan bahwa karakteristik ruang kota layak huni dan pengetahuan atau kearifan lokal terkait dapat dipahami melalui berbagai pendekatan atau paradigma penelitian, termasuk paradigma konstruktivistik. Dengan mengambil posisi konstruktivis, yang percaya adanya berbagai konstruksi mengenai dunia nyata, termasuk berbagai paradigma penelitian, yang tidak dapat dinafikan, dapat dipahami bahwa, tak ada cara untuk memilih salah satu dari berbagai konstrusi mengenai paradigma penelitian yang dirumuskan oleh para pakar, kecuali keyakinan penelitinya sendiri.

***Kata kunci**: paradigma penelitian, pemahaman, layak huni, ruang kota, pengetahuan local*

1. INTRODUCTION

By the year 2050, 70% of the global population expected to live in cities. This urbanization creates strong pressure for cities to provide livable solutions, to create human-centered cities with a genuine consideration for the environment.[i] The two very important keywords are "livable" and "human-centered". It means that local knowledge should play the most important role in creating human-centered livable urban space.

"Livability" is a broad term with no precise or universal definition. The concept of "livability" include many factors with its complex characteristics and states. "Livability" refers to the extent to which the attributes of a particular place can satisfy residents by meeting their broad needs ranging from food and basic scurity, economic and social needs, health and well-being, to protecting natural resources as well as ecosystem function, cultural expression needs, and a sense of belonging to a community or a place. [ii] "Livability" is also a relative term, with various meanings, which might be due to cultural differences or different living standards of various communities. Thereby, "livability" is a complex and multifaceted concept. Nevertheless, the idea of livability remains a powerful one.[iii]

It seems that, there is universally agreed upon the definition of "livability", within which indicators of livability for particular community could be identified and assessed, as well as the scale (population group scale or only with reference to places), at which livability should be measured. Experts try to translate the concept of "livability" in to a set of key dimensions of livability used as practical guidelines for policy making. These key dimensions of livability tend to be converted to a specific set of indicators that can be used for evaluation. At the urban level, for example, "livability" characterized as interdependent spheres of social life: the economy, social well-being, and the environment, named traditional place-based indicators. Economic indicators consist of median income, unemployment rate, job growth rate, and gross regional product. Social well-being indicators encompasses percentage of registered voters, high school graduation rate, as well as poverty rate. Environmental livability could be evaluated using ambient air quality, water quality, open space per capita, and also incidence of pollution-related illness as its indicators. [iv]

While experts dispose of a rather aggregated and universal abstract form of knowledge (in this case the knowledge of identification and assessment of "livability" indicators), the lay knowledge of inhabitants and users of an area is contextual and specific. It is bound to a local context, informal and based on common sense and experience. Each (sub) culture has its own proper values, standards, needs and wishes that are projected upon one shared livable space [v], known as local wisdom, or more specific, local knowledge.

"Local knowledge" is a collection of facts related to the entire system of concepts, beliefs and perceptions that people hold about the world around them. It includes the processes whereby knowledge is generated, stored, applied and transmitted to others. Local knowledge is the knowledge that people in a given community develop over time (dynamic and changing) based on experience adapt to the local culture and environment. Local knowledge is developed and adapted continuously to a gradually changing environment. Local knowledge often tested over centuries of use, embedded in community practices, institutions, relationships and rituals, held by individuals or communities. It is passed down from generation to generation and closely interwoven with people's cultural values [vi]. Local knowledge is the human capital invested in the struggle for survival.

Based on the characteristic of local knowledge as a collection of facts related to the entire system of concepts, beliefs and perceptions that people hold about the world around them, some basic questions relevant to the science of "livable urban space" are:

1. What is the nature of a given local knowledge?
2. What is the nature of a livable urban space and its indicators as well as its creation in the given local knowledge framework

But the most important question of all is which inquiry paradigm be the most appropriate pradigm to answer those above identified questions ?, since the inquiry paradigm guide to select problem for study, instruments and analytic modes used, as well as interpretation, conclusions, and recommendations made. Deciding to take one posture of various inquiry paradigms will guide the inquirer to comes to a certain finding or answer.

This working paper is about option for inquiry, about options among the paradigms or basic belief systems that guide action/inquiry to understand the meaning of livable urban space in a given local knowledge framework, and how local knowledge be implemented in creating livable urban space.

2. METHODOLOGY

Referring to the above formulated question, the aim of this working paper is to discuss the caharacteristic of various inquiry paradigms in guiding to understand the meaning of livable urban space in a given local knowledge framework, and how local knowledge be implented in creating livable urban space. This literature study contain discussion using various inquiry paradigms characterized by Guba as the analysis tool or the main referrence.

3. DISCUSSION

3.1. Inquiry Paradigm

The term "paradigm' will be used in this paper only in its generic sense, as a basic set of beliefs that guides action.[vii] There are various paradigms that guiding various actions, such as the religious paradigms that guide spiritual and moral life. This paper concerns with paradigms, that guide inquiry in local wisdom or local knowledge context. The main question is: which paradigm will be the most suitable for inquirying and understanding local wisdom or local knowledge as well as, consequently, urban space as its direct product? which paradigm will be the most suitable for inquirying and understanding livable urban space in local wisdom or local knowledge frame of work?

Guba (1990) characterized inquiry paradigms by the way they respond to these three basic questions: [viii]

Ontological: what is the nature of knowable or reality?

Epistemological: what is the nature of the relationship between the knower (the inquirer) and the known (or knowable)?

Methodological: how should the inquirer go about finding out knowledge?

The answers to those questions guide how inquiry should be practiced. There are, certainly, many different answers to those questions, which are known as inqury paradigms. Guba underlined four inquiry paradigms, positivism and its successors postpositivism, critical theory, as well as constructivism.

The caharacteristic of various inquiry paradigms in guiding to understand the meaning of livable urban space in a given local knowledge framework would be discussed below, refering to four inquiry paradigms characterized by Guba.

3.2. Positivistic Inquiry Paradigm

Guba (1990) characterized the basic belief of positivism paradigm rooted in a realist ontology, which is believes that reality really exixts out there driven by immutable natural laws or operating according to natural laws. Thereby, the positivist is constrained to practice an objective epistemology. Given the possibility of inquirer bias and unpredictable nature, the most appropriate methodology is thus empirical experimentalism. This manipulative methodology should control inquirer bias and the nature, together with empirical methods that place the point of decision with nature rather than with the inquirer. The ultimate aim of science is to predict and control natural phenomena. [ix]

According to basic beliefs of positivism characterized by Guba, the phrases "how things really are" and "how things really work" are ontological creeds of positivism. In context of understanding livable urban space in local knowledge framework, Positivists try to answer the question " what livable urban space really is?'', "what local knowledge really is"; "what livable urban space in local knowledge framework really is?" and "how this thing really works?' objectively. Rooted in a realist ontology, positivism believes that "livable urban space and its relevant local knowledge" are reality, which exist out there driven by immutable and rigorous natural laws. The business of science is to discover the "true" nature of livable urban space and its relevant local kowledge as realities and how they truly works. The ultimate aim of this science is to predict and control the phenomena of livable urban space in a given local knowledge.

If there are "livable urban space and its relevant local knowledge" as real phenomenon operating according to natural laws, then the inquirer just stand observing nature as "she does her things". The inquirer try to step out of the phenomena. Given the possibility of inquirer bias and the nature's propensity to confound, positivists use a manipulative methodology that controls for both (inquirer bias and the unpredictable nature) and empirical methods that place the point of decision with nature rather with the inquirer. [x] The knowledge comes from inquiry based on this objectivist epistemology and manipulative methodology, could be the "objective" knowledge of "true" nature of a given local knowledge, livable urban space and its indicators, as well as its

creation, in the given local knowledge framework. The ultimate aim of this science is to predict and control this phenomena, so that intervention programme or such a remedial programme for urban development or urban renewal in a given local or context could be objectively formulated dan applied.

3.3. Post-Positivistic Inquiry Paradigm

Guba elaborated the basic belief of post-positivism as an inquiry paradigm based on critical realist ontology, which is believes that reality is no doubt "out there" but it is impossible for human truly to perceive the existance of a "real world" driven by "real natural" causes with their imperfect sensory and intellective mechanisms. Post-positivists stick to their opinion, that realism remains the central concepts and objectivity remains a regulatory ideal, but objectivity can not be achieved in any absolute sense, it can only be approximated or be achieved reasonably closely. Based on critical realist ontology, post-positivists believe that findings emerge from the interaction between inquirer and inquired.[xi] To achieve approximated objective findings, inquirer have to be as neutral as possible, relying on a triangulation method as a manipulative methodology, called modified objectivist epistemology. It means that, it is essential that the findings of an inquiry be based on as many sources of data and informations as possible, to eliminated distorted interpretations, since human sensory and intellective mechanisms can not be relied upon.[xii]

As a modified version of positivism, post-positivism, with its critical realist ontology, believes that although the "true" nature of livable urban space and its relevant local kowledge as well as how they truly works as realities exist, it is mpossible for human truly to perceive it with their imperfect sensory and intellective mechanisms. Nevertheles, post-positivists strive for the attainment of knowledge of the "true" nature of livable urban space and its relevant local kowledge as realistic as possible, for the purpose of achieving objective findings or knowledge of "nature of livable urban space and its relevant local kowledge as well as how they truly works", so that the phenomena can be predicted and controled.

Believing that "findings" emerge from interaction between inquirer and inquired in to and also objectivity remains regulatory ideal, pos-positivists use modified objectivist epistemology to be as neutral as possible, to achieve to objective finding or knowledge of "nature" of livable urban space and its relevant local kowledge as well as how they truly works" as reasonably as close to reality as possible. Thereby, pos-positivist conducts research in a natural setting based on modified manipulative methodology. Inquirer uses qualitative methods, depends on grounded theory and as many sources of data and informations as possible, to eliminated distorted interpretations. [xiii] The business of science is to discover the "true" nature of a given local knowledge, livable urban space and its indicators, as well as its creation in the given local knowledge framework. Like positivism, the ultimate aim of this science is to predict and control phenomena, so that intervention programme or such a remedial programme for urban development or urban renewal could be objectively formulated dan applied.

3.4. Critical Theory Inquiry Paradigm

As characterized by Guba (1990), critical theory belongs to ideologically oriented inquiry, which rejects value free inquiry developed by positivist and pospositivist. Critical theory believes that nature cannot be seen as it "really is" or "really works" except through a value window.[xiv] Because inquiry paradigms are human construction, they inevitably reflect the values of their human constructors. Cosequently the findings are constructed by inquirer based on their values, as a false consciousness of the inquirer. In this context, the important question arises as to what and whose values shall govern. It seems that citical theorist or ideologist believes in obyektive reality based on critical realist ontology. Critical theorist believe that there is a "true consciousness" possessed by some better elite. The aim of research is thus to energize and facilitate participants to raise their consciousness in transforming the real world and comme to a common point of view about the real world, by using a dialogic and transformative methodology.

Based on what Guba (1990) characterized as basic beliefs of critical theory, where value does play the most important role in every inquiry exploring the nature of livable urban space and local knowledge, the "true" nature of a given local knowledge, livable urban space and its indicators, as well as its creation in the given local knowledge framework can only be seen as it "really is" or"really works" through a value window. Because paradigms are human construction, they inevitably reflect the values of their human constructors[xv]. Understanding nature of a given local knowledge, livable urban space and its indicators, as well as its creation in the given local knowledge framework inevitably reflects the values of their human constructors, which is termed as false consciousness.

The task of inquiry, then, to transform the (real) world or the real livable urban space and local knowledge phenomena by raising the consciousness of people or participants to a level of "true conciousness" . The aim of research is thus to energize and facilitate participants to raise their consciousness in transforming the real world and comme to a common point of view about the real world, the real livable urban space and local knowledge phenomena. The inquiry should energize and facilitate people or paricipants toward the "true conciousness" on the nature of a given (or their) local knowledge, (their) livable urban space and its indicators, as well as its creation in the given (or their) local knowledge framework. Thereby, the inquiry takes a dialogic approach to eliminate false conciousness and rally participants a round a common "true" point of view. In this process, feature of the real world (in this case, the feature of local knowledge, livable urban space and its indicators, as well as its creation) and judgments are made about which of them can be altered, with transformation as the ultimate result.

The phenomena is getting more interesting and complex within the very heterogeneous values background of the city inhabitans. It makes inevitably very much complex constructions of understanding livable urban space based on various local knowledge of heterogeneous city inhabitans. Facing this fact, then one important question is "in which socio-spatial scale the inquiry should be done?"

3.5. Constructivistic Inquiry Paradigm

The fourth inquiry paradigm discussed is constructivistic inquiry pradigm. Guba (1990) characterized this paradigm as an inquiry pradigm, which believes that reality exists only in the context of a mental framework (construct) for thinking about it. Thereby, there are always a large number of theories that can explain a given body of value ladenness facts. There can be many possible constructions, and there is no foundational way to choose among them. Reality can be seen only through a window of theory, wether implicit or explicit. [xvi] Constuctivists believe that obyektivity is not possible. The results of an inquiry are always shaped by the interaction of inquirer an inquired into, so that findings of an inquiry are rather scientific knowledges concluded from the residu of the process that literally creates them than a report of what is about there. It depicts knowledge as the outcome or consequence of human activity, interpreted and contructed by the participants, which never certifiable as ultimate truth or falsity, but problematic and ever changing. [xvii] In this context, constructivists tend to take a position of relativism ontology, which make inquiry remain open for continuing search to get ever more informed and sophisticated consruction. The key phrases are " realities are multiple" and "realities exist in people's minds". Epistemologically, the constructivists choose to take a subjectivist position, proceed to identify the variety of existing constructions and bring them into as much consensus as possible through hermeneutic-dialectic approach.

Based on basic belief of constructivistic inquiry paradigm characterized by Guba above, where constructivists take a posture of relativism, constructivists believe that there are many interpretations or constructions of the nature of local knowledge, livable urban space and its indicators, as well as its creation in the given local knowledge framework can be made in any inquiry. Relativism make it possible to continue searching for ever more informed and sophisticated knowledge construction of livable urban space and local knowledge. Realities of livability and local knowledge (local wisdom) are multiple and exist in people's mind. It is getting very much complex to understanding livable urban space based on various local knowledge of heterogeneous city inhabitans. Same as the facts faced by ideologists (critical theorists) , then one important question tobe answered is "in which socio-spatial scale the inquiry should be done and findings tobe concluded?"

Since realities exist only in people minds, the task of inquiry is unlocking the construction of livable urban space and local knowledge held by individuals. Thereby, epistemologically, constructivists take a subjectivist position. The business of science is to identify the various constructions of livable urban space and local knowledge that exist in people's mind and bring them into as much consensus as possible, through hermeneutics and dialectics method. Depicting individual constructions (including the inquirer's) as accurately as possible hermeneutically, comparing and contrasting them dialectically to come to substantial consensus of one or few knowledge constructions of livable urban space and local knowledge. Constructivism, thus, intends neither to predict and control the real world, that is the reality of livable urban space and local knowledge, nor to transform it but to reconstruct the world at the only point at which it exists in the minds of constructors. It is the mind that is to be transformed, not the "real" world. [xviii]

4. CONCLUSION

By the year 2050, urbanization make 70% of the global population expected to live in cities, and creates strong pressure for cities to provide livable solutions, to create human-centered cities with a genuine consideration for the environment. The two very important keywords are "livable" and "human-centered". It means that local knowledge should play the most important role in creating human-centered livable urban space

The nature of a given local knowledge, livable urban space and its indicators, as well as its creation in the given local knowledge framework, thereby, should be appropriately explored or inquired. Based on the characteristic of local knowledge **as** a collection of facts related to the entire system of concepts, beliefs and perceptions that people hold about the world around them, deciding to take one posture of various inquiry paradigms will guide the inquirer to comes to a certain finding.

Using inquiry paradigms characterized by Guba as analysis tools, literature based discussion in this paper concludes that the nature of local knowledge, livable urban space and its indicators, as well as its creation in the given local knowledge framework can be understood from four inquiry paradigms points of view, positivistic, post-positivistic, critical theory, and constructivism. There are at least four inquiry paradigms with its own various beliefs, which are reflected on its various ontological, epistemological, and methodological characteristics. Take the constructivist posture, which believes that there can be many constructions, including various inquiry paradigms, which can not be rejected out of hand, thereby, could be understood that there is no foundational way to choose among various constructions of inquiry paradigms proposed by reasonable and well-intentioned person, except the inquirer's belief.

ENDNOTES

http://www.wrirosscities.org/news/planning-livable-urban-future, accessed on 20-09-2016

[2] Committee on Identifying Data Needs for Place-Based Decision Making. 2002. Community and Quality Of Life Data Needs For Informed. Washington, D.C.: National Academy Press, page 23

[3] Committee on Identifying Data Needs for Place-Based Decision Making. 2002. Community and Quality Of Life Data Needs For Informed. Washington, D.C.: National Academy Press, page 27

[4] Committee on Identifying Data Needs for Place-Based Decision Making. 2002. Community and Quality Of Life Data Needs For Informed. Washington, D.C.: National Academy Press, page 36

[5] Apostel, Katrijn. Using local knowledge in urban design practice. International Conference Arquitectonics Network: Mind, Land & Society 1-3 June 2016, Barcelona

[6] What is local knowledge. FAO Corporate Document Repocitory. Economic and social development Department http://www.fao.org/docrep/007/y5610e/y5610e01.htm, September 15th 2016
Warburton and Martin (1999) and FAO Web site for Gender, Agrobiodiversity and Local Knowledge

[7] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 17

[8] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 18

[9] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 19-20

[10] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 19

[11] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 20-23

[12] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 20-23

[13] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 23

[14] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 23

[15] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 23-25

[16] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 25-7

[17] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 25-7

[18] Guba, Egon C. 1990. The Paradigm Dialog. Newbury Park: Sage Publications, page 27

REFRENCES

1) Apostel, Katrijn. (2016) *Using local knowledge in urban design practice.* International Conference Arquitectonics Network: Mind, Land & Society 1-3 June 2016, Barcelona

2) Committee on Identifying Data Needs for Place-Based Decision Making. (2002). *Community and Quality Of Life Data Needs For Informed.* Washington, D.C.: National Academy Press.

3) FAO Corporate Document Repocitory. (2016). *What is local knowledge . Economic and social development Department* http://www.fao.org/docrep/007/y5610e/y5610e01.htm, September 15th 2016

4) Guba, Egon C. (1990). *The Paradigm Dialog. Newbury Park: Sage Publications*

5) http://www.wrirosscities.org/news/planning-livable-urban-future, accessed on 20-09-2016

6) Warburton and Martin (1999) and FAO Web site for Gender, Agrobiodiversity and Local Knowledge